

Exercise 1 A particular car is known to have a fuel efficiency of 23 miles/-gallon (mpg).

- (a) If this car is driven 23 miles, it uses $\boxed{1}$ gallons of fuel.
 - (b) If this car is driven 115 miles, it uses $\boxed{5}$ gallons of fuel.
 - (c) Call x the number of miles driven and y the gallons of fuel used. Then x and y have a linear relationship.
 - (i) The slope of this linear relationship is $\boxed{1/23}$ gallons/mile.
 - (ii) The equation of this line in slope-intercept form is given by $y = \boxed{(1/23) * x + 0}$.
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